

SPINDLE MOTOR AND DISK DRIVE FURNISHED THEREWITH

Abstract

Spindle motor utilizing a dynamic-pressure bearing device having a full-fill structure and capable of discharging air bubbles from the lubricating oil after it is charged into the bearing device, as well as air bubbles appearing in the oil due to cavitation in handling. Thrust and radial bearing sections are configured within bearing clearances in between the rotor, the shaft, and a shaft-encompassing hollow bearing member. A communicating passage enabling the oil to redistribute itself within the bearing clearances is formed in the bearing member. At least one ray-like groove that reaches from the radially inward edge of dynamic-pressure-generating grooves in the thrust bearing section to the rim of the shaft-encompassing hollow is furnished in the bearing member. When the motor rotates the air bubbles are stirred and minced by the ray-like groove, and migrate toward release at the single oil-air interface.